

The Burden of Asthma in Washington State: Executive Summary

In Washington State...

Asthma is an important issue for people concerned about the public's health

- Although death from asthma is uncommon – about 100 people per year die in Washington each year from asthma – treatment of asthma places a significant economic burden on the public and symptoms of asthma place a substantial burden on affected individuals and their families
- More than 5,000 people are hospitalized every year – more than 100 every week – as a direct result of asthma; more than half the hospitalizations are paid for by Medicare or Medicaid
- Direct medical costs for asthma in Washington are about \$240 million each year
- In total, asthma costs more than \$400 million every year in medical expenditures and lost productivity for the state
- Between 1995-2002 more than a thousand claims were paid by state worker compensation funds for work-related asthma totaling \$12 million
- Having asthma reduces quality of life, limits activities, and is associated with depression and suicidal thoughts among young people
- About 48,000 adults with asthma make at least one emergency department visit per year and 100,000 make at least one urgent visit to see their doctors for worsening asthma symptoms each year
- More than 75% of adults and youth with asthma had symptoms during the past month – these include cough, wheezing, shortness of breath, chest tightness and phlegm; half of adults and one-third of youth had trouble sleeping because of their symptoms
- Youth with asthma miss school because of their condition, and those with more severe asthma symptoms are less likely to have high academic achievement than youth with few symptoms or those without asthma.

A large and growing number of people are affected by asthma

- About 400,000 Washington adults – one in ten women and one in fourteen men – currently have asthma
- About 120,000 Washington youth are currently affected by asthma
- The percentage of our state population with asthma is steadily increasing - the prevalence of asthma has increased significantly for adults and households with children between 1999 and 2003
- Washington's asthma prevalence has been identified by CDC as one of the highest in the nation – both adult and youth prevalence are significantly greater than national averages
- About 9% of adults have asthma, between 7-10% of middle/high school-aged children have asthma, and one in ten households with children of any age have a child with asthma.

Development of asthma is associated with individual factors – some can be controlled, and others can't

- Among young children, asthma prevalence is higher for boys than for girls; by middle school age these differences reverse so that by high school and in later years rates are higher for women than for men
- People who smoke cigarettes or who are obese are significantly more likely to have asthma than people who do not smoke or are not obese
- Younger youth who use inhaled intoxicants, marijuana or cigarettes are significantly more likely to have asthma than youth who do not
- Many people who develop asthma have allergies, particularly those with childhood onset of asthma
- Some people are genetically more vulnerable to developing asthma than other people
- Hospitalization rates are highest for children under age 5, but death rates are highest for people older than 65.

People with asthma need better access to healthcare and healthcare providers need more guidance about what quality care for asthma includes

- Deaths attributed to asthma have been declining since the mid-90s, most likely in response to successful clinical practice improvements
- More than one in ten people with asthma have severe persistent symptoms – frequent exacerbations and continuous symptoms
- People with asthma are more likely than people without asthma to report they had unmet healthcare needs – times when they wanted to see a doctor but couldn't due to a lack of money
- About half of adults and youth with asthma reported seeing a healthcare provider in the past year for a planned preventive asthma visit
- Only one-third of youth with asthma reported ever having a written asthma plan to help them control their medications and exposures
- About three in ten seniors with asthma have not received flu and pneumonia vaccines, a recommended component of healthcare for asthma patients but also for all seniors in general
- Only one in ten smokers with asthma reported receiving advice to quit from a doctor during the past year, which is also a recommended component of healthcare for asthma patients
- About three-quarters of people with asthma are taking some kind of medication, about one-third of people with asthma are using medication twice or more per day
- School nurses need continued and increased support to manage thousands of children with life-threatening asthma in Washington schools
- Healthcare providers, including school nurses and staff, should be aware that people with asthma are more likely to have other chronic conditions such as diabetes, hypertension (adults), depression, and suicide ideation (youth); multi-component treatment strategies may be necessary.

Things in your environment can cause asthma or make asthma worse

- Exposure to secondhand smoke causes asthma in children – more than 40,000 children ages 5 or younger in our state are exposed to secondhand smoke at home – about 500 new cases of asthma each year are caused by exposure to secondhand smoke
- There is sufficient evidence for a causal relationship between exposure to dust mites and development or exacerbation of asthma – most houses contain habitats for mite growth such as mattresses, pillows, bedding, stuffed animals
- There is sufficient evidence that other indoor air contaminants such as cat, dog, and cockroach allergen, woodsmoke, damp environments and mold in damp environments make asthma worse
- A substantial number of people with asthma have “triggers” in their homes that they may not realize make their asthma worse – carpet, pets, cockroaches, water damage, secondhand smoke and mold
- Air pollution exposure, including from fine particulate matter, nitrogen oxides, carbon monoxide, sulfur dioxide, diesel exhaust, and woodsmoke makes asthma worse and ozone causes new asthma.

People responsible for community, worksite, school, and housing environments can make a difference to prevent and reduce the burden of asthma

- Asthma is affected by outdoor air quality – outdoor air quality is improving, but still affected by mobile vehicle exhaust (cars, buses, trucks, ships and trains), woodstoves, outdoor burning, and industrial emissions
- Although Washington’s air quality is generally good and has improved substantially over time, there are areas of the state where air pollution is of concern and higher rates of hospitalization in urban areas may be related to asthma exacerbation from air pollution
- The proportion of adult-onset asthma that can be attributed to workplace exposures has been estimated to be between 5-25%; occupational exposures are very different for different occupations, but secondhand smoke is an asthma trigger that many workers are still exposed to
- Asthma is worsened by secondhand smoke exposure – smoking is still allowed in some worksites, including worksites where the public can visit and also be exposed, such as restaurants, bars, and casinos
- Poor air quality at school exacerbates asthma and is also associated with decreased student attendance in the general population – air in or around schools may be affected by management of ventilation and filtration systems, cleaning practices, reduction of “idling” by school bus engines or others waiting to pick up students, and retrofitting school buses with particle filters or oxidative catalytic converters
- Asthma among children is caused or worsened by secondhand smoke exposure, and smoking occurs in many homes – one in ten youth lives in a home where smoking is allowed, and almost one in ten non-smoking adults with asthma is exposed to smoking at home.

Some people are unfairly affected by asthma as a result of societal inequities

- Asthma hospitalization rates are higher in urban areas than in rural areas
- Low income people and those with the least education are more likely to have asthma
- Lesbian/bisexual women have significantly higher rates of asthma than straight women or men
- Native Americans have higher prevalence of asthma than non-Hispanic whites, and both Native Americans and African Americans have significantly higher rates of death due to asthma than non-Hispanic whites.

We know what to do about asthma in Washington State

- Public health partners are developing a comprehensive State Asthma Plan to prioritize and implement strategies for reducing the burden of asthma in Washington State.